

## Abstract

The present invention discloses a safety syringe and aims to provide simple structure, convenient use, and low cost, and to make the syringe have needle protection functionality and become auto-disable. The present invention includes a sliding casing, a needle, a syringe barrel, a piston, a latching casing, a spring and a plunger inside the syringe barrel, the present invention can be easily used to carry out an injection and to initiate its safety mechanism by a single hand. The sliding casing can be automatically positioned and locked in two directions; This design guarantees during processing the syringe after it is used, the pinhead is always protected by the sliding casing; The present invention also has a reliable function of auto-locking; Therefore, once the syringe is used, the plunger has been locked in the syringe barrel and can not be pulled out any longer; Any attempt to use the syringe again will cause the plunger broken and the syringe damaged, thus ensuring a one-time use.

15